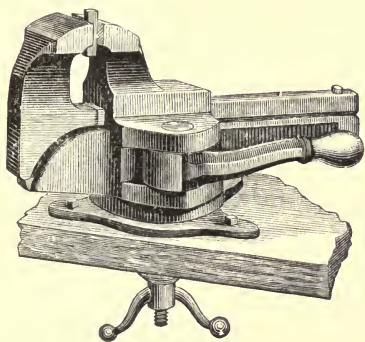
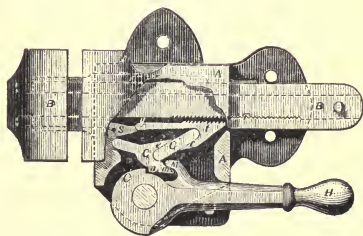


VICES.

STEPHENS' PATENT PARALLEL BENCH VISES.



2-in. Swivel Vise, \$4 75.



Shows working parts Cam and Toggle.

2-in. Flat or Stationary Vise, \$4.

The above right-hand cut shows the Stephens Flat Vise with top removed, and working parts exposed to view.

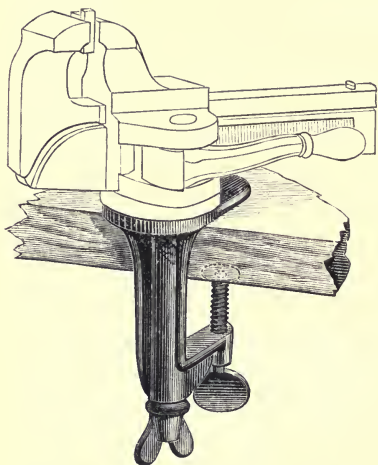
It consists simply of a toggle, *G G*, and tooth-bar, *t*, held together by a spring, *S*, all worked by a cam, *C*, and hook, *M*, on the handle, *H*.

A steel rack, *T*, is inserted in the sliding-bar, *B B*. The sliding-bar is here seen disengaged, free to slide in or out, with perfect ease, to its extreme limits.

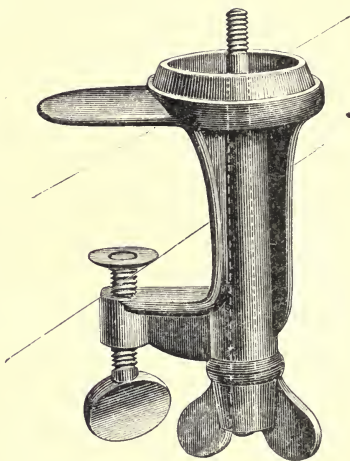
At the first start of the handle outward, the hook, *M*, slips from the tooth, *m*, and the spring, *S*, draws down upon the hook at *U*, firmly setting the tooth-bar, *t*, against the rack, *T*; as the handle is pulled further outward, the cam is brought to bear against the ridge, *n*, nearly straightening the toggle, and forcing the movable jaw with great power against the object between the jaws.

Jaws 2 inches wide ; open $2\frac{1}{4}$ inches.

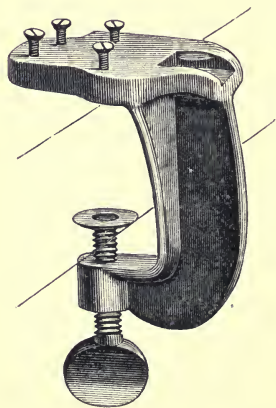
Important.—Occasionally rub *one drop* of oil on the cam, *C*, and hook, *M*. Never oil any other part.



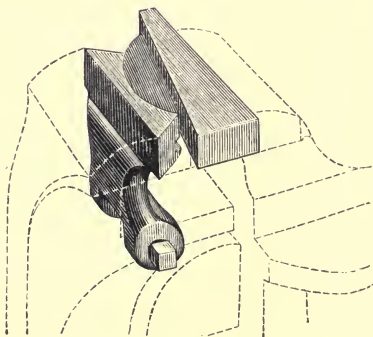
Swivel Vise on the Table-Clamp. Price, \$6 75.



Swivel Table-Clamp. Price, \$2.



Jewelers' Flat Table-Clamp.
No injury to table.
Price, \$1.



2-in. Taper Attachment. Price, \$2.

PRICE-LIST OF VISES.

JEWELLERS'.

| Width of Jaw. | Style of Vise. | Opens. | W'ght. | Price | Width of Jaw. | Style of Vise. | Opens. | W'ght. | Price |
|---------------------|-------------------|--------|--------|--------|---------------------|-------------------|--------|--------|--------|
| 2 in. | Flat..... | 2¼ in. | 2 lbs. | \$4 00 | 2 in. | Swivel..... | 2¼ in. | 3 lbs. | \$4 75 |
| 2 in. | Flat, with Anvil. | 2¼ in. | 2 lbs. | 4 50 | 2 in. | Swivel, with Anv. | 2¼ in. | 3 lbs. | 5 25 |

| | | | | | | | | | |
|--------|-------------------|--------|---------|---------|--------|-------------------|--------|---------|---------|
| 2¼ in. | Flat..... | 3 in. | 12 lbs. | \$5 50 | 2¼ in. | Swivel..... | 3 in. | 14 lbs. | \$6 50 |
| 2¼ in. | Flat Filers'..... | 3 in. | 12 lbs. | 5 50 | 2¼ in. | Swivel Filers'... | 3 in. | 14 lbs. | 6 50 |
| 3½ in. | Flat..... | 5 in. | 35 lbs. | \$9 00 | 3½ in. | Swivel..... | 5 in. | 42 lbs. | \$10 50 |
| 3½ in. | Flat Filers'..... | 5 in. | 35 lbs. | 9 00 | 3½ in. | Swivel Filers'... | 5 in. | 42 lbs. | 10 50 |
| 4½ in. | Flat..... | 6½ in. | 60 lbs. | \$12 50 | 4½ in. | Swivel..... | 6½ in. | 66 lbs. | 14 50 |
| 4½ in. | Flat Filers'..... | 6½ in. | 60 lbs. | 12 50 | 4½ in. | Swivel Filers'.. | 6½ in. | 66 lbs. | 14 50 |

With Extension Handles:

| | | | | | | | | | |
|--------|-----------|--------|----------|---------|--------|-------------|--------|----------|---------|
| 5½ in. | Flat..... | 9 in. | 110 lbs. | \$22 00 | 5½ in. | Swivel..... | 9 in. | 120 lbs. | \$26 00 |
| 6½ in. | Flat..... | 10 in. | 160 lbs. | \$33 00 | 6½ in. | Swivel..... | 10 in. | 175 lbs. | \$39 00 |

COACH OR WOOD-WORKERS'.

| Op'ns. W'ght. Price. | | | Op'ns. W'ght. Price. | | |
|---|-------|-----------------|--|--------|-----------------|
| Flat Vise, with square-faced caps, 4x4½ in., attached.. | 8 in. | 43 lbs. \$15 00 | Flat Vise, with square-faced Caps, 5x5½ in., attached.. | 10 in. | 70 lbs. \$20 50 |
| Swivel Vise, with square-faced Caps, 4x4½ in., attached | 8 in. | 50 lbs. 16 50 | Swivel Vise, with square-faced Caps, 5x5½ in., attached..... | 10 in. | 75 lbs. 22 50 |

JEWELLERS'—NICKEL-PLATED, EXTRA FINISH.

| | | | |
|-------------------------------------|--------|--------------------------------|--------|
| 2 inch Flat Vise..... | \$9 00 | 2 inch Pipe attachment..... | \$3 00 |
| 2 inch Flat Vise, with Anvil..... | 9 50 | 2 inch Flat Table Clamp..... | 2 50 |
| 2 inch Swivel Vise..... | 9 75 | 2 inch Swivel Table Clamp..... | 4 50 |
| 2 inch Swivel Vise, with Anvil..... | 10 25 | 2 inch Vise Caps..... | 1 00 |
| 2 inch Taper Attachment..... | 3 00 | | |

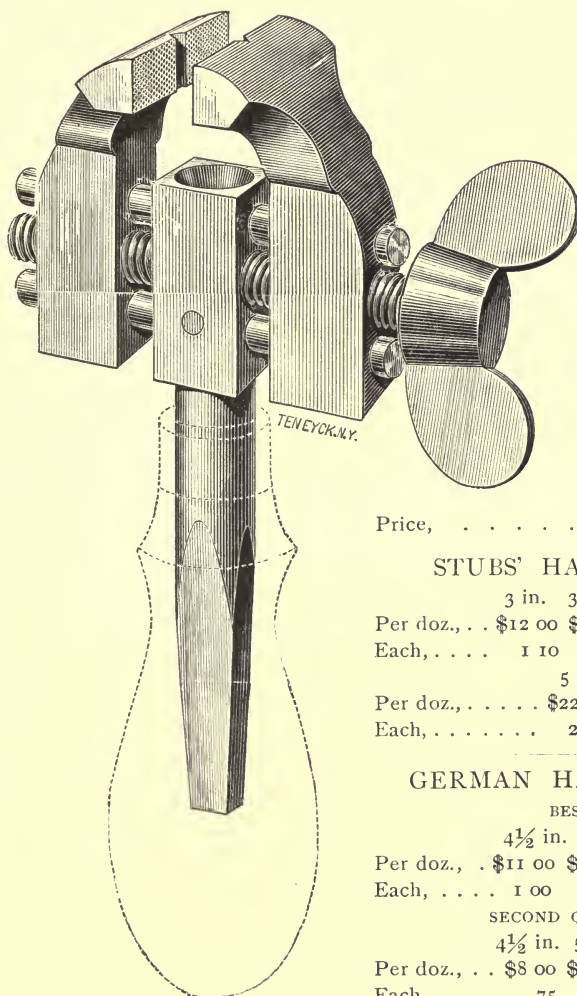
VISE ATTACHMENTS.

When Vises are ordered *complete*, we add the following Attachments:

| | | | |
|---|--------|--|--------|
| 2 inch Taper Attachment.. | \$2 00 | 4½ inch Taper Attachment..... | \$5 50 |
| 2¼ " " | 2 75 | 5½ " " | 7 50 |
| 3½ " " | 4 00 | 6½ " " | 10 00 |
| 2 inch Pipe Attachment..... | \$2 00 | 4½ inch Pipe Attachment..... | \$5 50 |
| 2¼ " " | 2 75 | 5½ " " | 7 50 |
| 3½ " " | 4 00 | 6½ " " | 10 00 |
| 2 inch Brass Vise Caps..... | \$0 50 | 4½ inch Brass Vise Caps..... | 1 25 |
| 2¼ " " | 75 | 5½ " " | 2 00 |
| 3½ " " | 1 00 | 6½ " " | 2 50 |
| 2 in. Flat Table Clamp (no injury to table), \$1 00 | | 2¼ in. Flat Table Clamp (no injury to table), \$2 00 | |
| 2 in. Swivel " " | 2 00 | 2¼ in. Sw'l " " | 3 00 |

| | |
|--|--------|
| Jewellers' or Wood-Workers' Caps for 2 inch Vise, 2x2 inch face..... | \$2 00 |
| Coach or Wood-Workers' Caps for 2¼ inch Vise, 3x3 inch face..... | 3 00 |
| " " " " 3½ " 4x4½ " | 4 00 |
| " " " " 4½ " 5x5½ " | 5 00 |

STEPHENS' PATENT HAND VISE.



This Vise will centre and hold firmly any tool placed in it, and may be used in the hand, on a bench, lathe, or bit-stock. The jaws, screw, and cross-bar are made of tempered steel. The handle, shown by the dotted lines, is made of hard maple, and may easily be removed, when the Vise is to be used in a lathe or bit-stock.

Price, \$2 each

STUBS' HAND VISE.

| | | | | |
|-------------------|---------|---------|---------|---------|
| | 3 in. | 3½ in. | 4 in. | 4½ in. |
| Per doz., . . | \$12 00 | \$13 25 | \$14 25 | \$16 50 |
| Each, | 1 10 | 1 25 | 1 35 | 1 50 |
| | | 5 in. | 5½ in. | 6 in. |
| Per doz., | | \$22 00 | \$26 50 | \$37 50 |
| Each, | | 2 00 | 2 50 | 3 25 |

GERMAN HAND VISES.

BEST.

| | | | | |
|---------------|---------|---------|---------|---------|
| | 4½ in. | 5 in. | 5½ in. | 6 in. |
| Per doz., . . | \$11 00 | \$12 00 | \$14 50 | \$18 00 |
| Each, | 1 00 | 1 15 | 1 30 | 1 60 |

SECOND QUALITY.

| | | | | |
|---------------|--------|---------|---------|---------|
| | 4½ in. | 5 in. | 5½ in. | 6 in. |
| Per doz., . . | \$8 00 | \$10 00 | \$12 00 | \$13 50 |
| Each, | 75 | 1 00 | 1 15 | 1 25 |

HANDLED HAND VISES, to 4½ inches, per dozen, \$11 ; each, \$1.

POLISHED SWISS HAND VISES.

| | | | | | | |
|------------------|---------|---------|---------|---------|---------|---------|
| | 3¼ in. | 3½ in. | 3¾ in. | 4 in. | 4¼ in. | 4½ in. |
| Per dozen, . . . | \$11 00 | \$12 00 | \$12 00 | \$13 50 | \$15 00 | \$16 50 |
| Each, | 1 00 | 1 10 | 1 15 | 1 25 | 1 40 | 1 50 |